



E9\*3R02/17\*23523\*00

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COMUNICACIÓN / COMMUNICATION:

Concerniente a <sup>(1)</sup>: LA CONCESIÓN DE HOMOLOGACIÓN  
LA EXTENSIÓN DE HOMOLOGACIÓN  
LA DENEGACIÓN DE HOMOLOGACIÓN  
LA RETIRADA DE HOMOLOGACIÓN  
EL CESE DEFINITIVO DE PRODUCCIÓN

Concerning <sup>(1)</sup>: APPROVAL GRANTED  
APPROVAL EXTENDED  
APPROVAL REFUSED  
APPROVAL WITHDRAWN  
PRODUCTION DEFINITELY DISCONTINUED

de un tipo de dispositivo catadióptrico en aplicación del Reglamento N°3.  
of a type of retro reflecting device pursuant to Regulation No.3.

N° de homologación / Approval No.: E9\*3R02/17\*23523\*00

Extensión N° / Extension No.: ---

1. Marca de fábrica o comercial del dispositivo / Trade name or mark of the device: FRISTOM
2. Designación del tipo de dispositivo dado por el fabricante / Manufacturer's name for the type of device: FT-072 LED
3. Nombre y dirección del fabricante / Manufacturer's name and address:  
FRISTOM SPÓLKA Z OGRANICZONA  
ODPOWIEDZIALNOSCIA SPÓLKA  
KOMANDYTOWA  
UL. PRZEMYSŁOWA 5, 86-014  
85416 SICIENKO  
SICIENKO (POLONIA)

Nota / Note: Este dispositivo puede ser fabricado en cualquiera de las Plantas de Fabricación que consten declaradas en el Anexo I del Certificado Conformidad Producción en vigor emitido por la UCA. / This device may be manufactured in any of the Manufacturing Plants declared in Annex I of the Conformity Production Certificate in force issued by the UCA.

4. En su caso, nombre y dirección del representante del fabricante / If applicable, name and address of manufacturer's representative: ---
5. Dispositivo presentado a homologación el / Submitted for approval on: 05/04/2020
6. Servicio técnico encargado de los ensayos de homologación / Technical service responsible for conducting approval test: IDIADA
7. Fecha del informe emitido por dicho servicio / Date of report issued by that service: 22/04/2020
8. Número del informe emitido por dicho servicio / Number of report issued by that service: PC20020202
9. Breve descripción / Concise description:

<sup>(1)</sup> Táchese lo que no proceda / Strike out what does not apply





E9\*3R02/17\*23523\*00

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- Aislado / forma parte de un conjunto de dispositivos <sup>(1)</sup> / ~~In isolation~~ / part of an assembly of devices <sup>(1)</sup>
  - Color de la luz emitida: blanco / rojo / amarillo auto <sup>(1)</sup> / Colour of light emitted: white / red / amber <sup>(1)</sup>
  - Montaje como parte integrante de una luz integrada en la carrocería de un vehículo / Installation as an integral part of a lamp which integrated into the body of a vehicle: ~~sí/yes~~ - no / no <sup>(1)</sup>
  - Condiciones geométricas de instalación y variaciones relacionadas, en su caso / Geometrical conditions of installation and relating variations, if any: ---
  - Solamente para instalación limitada en altura igual o inferior a 750 mm por encima del suelo / Only for limited mounting height of equal to or less than 750 mm above the ground: ~~sí/yes~~ - no / no <sup>(1)</sup>
10. Posición de la marca de homologación / Position of the approval mark: Ver documentación suministrada por el fabricante / See documentation supplied by the manufacturer.

<sup>(1)</sup> Táchese lo que no proceda / Strike out what does not apply





E9\*3R02/17\*23523\*00

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11. Motivos de la extensión (en su caso) / *Reason(s) of extension (if applicable):* ---
12. Se concede/~~deniega~~/~~extiende~~/~~retira~~ la homologación <sup>(1)</sup> / *Approval granted/refused/extended/withdrawn* <sup>(1)</sup>
13. Lugar / *Place*: Madrid
14. Fecha / *Date*: Ver firma electrónica / *See electronic signature*
15. Firma / *Signature*:  
  
EL SUBDIRECTOR GENERAL DE CALIDAD Y SEGURIDAD INDUSTRIAL  
Resolución P.D. del DIRECTOR GENERAL DE INDUSTRIA Y DE LA PYME de 25-10-2012
16. Se adjunta la lista de apartados que constituyen el expediente de homologación depositado en el servicio administrativo que ha concedido la homologación y que pueden ser obtenidos a petición. / *The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request.*
  - Informe del ensayo / *Test report*
  - Documentación suministrada por el fabricante / *Documentation supplied by the manufacturer*

<sup>(1)</sup> Táchese lo que no proceda / *Strike out what does not apply*



## INFORMATION FOLDER:

FIRST APPLICATION  
DATE: 15.04.2020

### 1. Specification data

|                             |                                                                          |                                                 |
|-----------------------------|--------------------------------------------------------------------------|-------------------------------------------------|
| Type                        | FT-072 LED                                                               |                                                 |
| Trade name or mark          | Fristom                                                                  |                                                 |
| Variants                    | FT-072 B LED ; FT-072 Z LED ; FT-072 C LED                               |                                                 |
| Function                    | Front position ; side marking , rear position , retro reflector class IA |                                                 |
| Color                       | white light color , amber light color , white light color                |                                                 |
| Rated                       | Voltage                                                                  | 12V/24V                                         |
|                             | Wattage                                                                  | 12V=1,2 W ; 24 V= 2,4 W                         |
| Applicable Regulation       |                                                                          | R07 ; R91 ; R03                                 |
| Light Source and connection |                                                                          | 3 LED`s serial connected in 6 parallel sections |
| Location of marking         | Light Source marks                                                       | See the drawing                                 |
|                             | Trade mark                                                               | Marked on lampshade                             |
|                             | Approval mark                                                            | Marked on the lampshade                         |

### 2. Construction and material

| Construction | Material                         | Remarks |
|--------------|----------------------------------|---------|
| Lenses       | Defined on the technical drawing | --      |
| Reflectors   | Defined on the technical drawing | --      |
| Bases        | Defined on the technical drawing | --      |

### 3. Name and address of manufacturer:

**FRISTOM Spółka z ograniczoną odpowiedzialnością Spółka komandytowa**  
86-014 Sicienko / Polska  
ul. Przemysłowa 5  
NIP: 5542926937, KRS: 0000529238  
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41

### 4. REASON OF THE APPROVAL EXTENSION:

---

**NOTE :** APPROVAL MARKINGS ARE SHOWN IN THE ATTACHED DRAWING. tel. 52 360 90 50

THIS INFORMATION FOLDER CONSISTS OF 1 PAGES

**FRISTOM**  
Spółka z ograniczoną odpowiedzialnością Sp. k.  
86-014 ŚCIENKO, ul. Przemysłowa 5  
[www.fristom.com.pl](http://www.fristom.com.pl)  
NIP 5542926937 REGON 341640907

MICHAŁ DYBICZ

IDIADA PC20020202

## Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.  
86-014 Ścieńko / Polska  
ul. Przemysłowa 5  
NIP: 5542926937, KRS: 0000529238  
Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



**Drawn by:** Michał Dybicz  
**Date:** 15-04-2020  
**sheet Nr.:** 1/5

## Type

**FT-072 B LED** – front LED position lamp with retro reflecting device IA

## light source

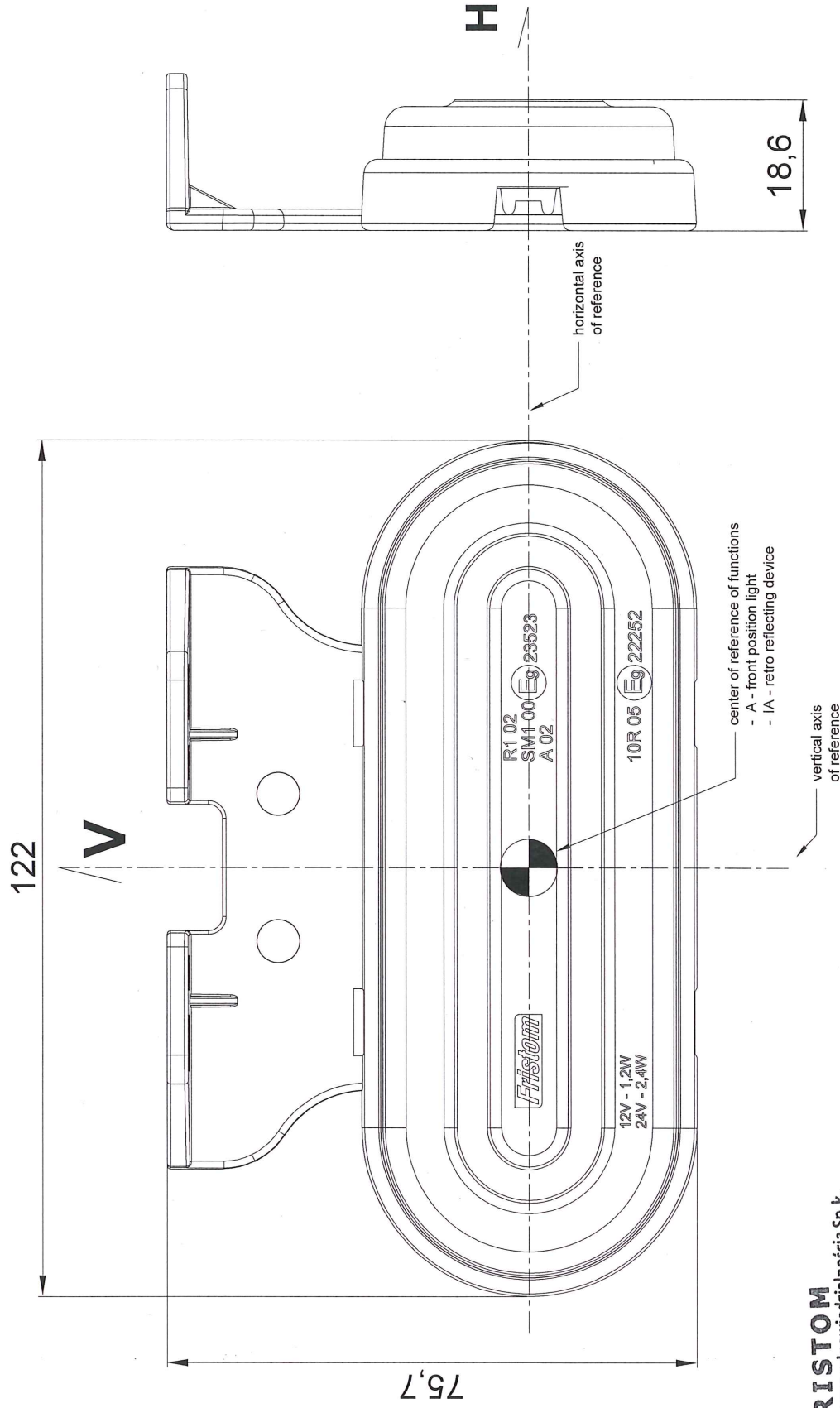
LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's white light color

## sheet description

general drawing / lamp functions  
This drawing is a part of the application for approval

## Material used in manufacturing :

- lampshade PMMA transparent clear
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



## FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp.k.  
86-014 ŚCIEŃKO, ul. Przemysłowa 5

tel. 52 360 90 50

[www.fristom.com.pl](http://www.fristom.com.pl)

NIP 5542926937 REGON 341640907

front view with angled assembly bracket  
PC20020202

MICHAŁ DYBICZ

## Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. z o.o.  
86-014 Sicienko / Polska  
ul. Przemysłowa 5  
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Tel.: +48 52 360 90 51, Fax: +48 52 327 75 41



Drawn by: **Date:**

Michał Dybicz 15-04-2020

sheet Nr.

2/5

## Type

**FT-072 B LED** - front LED position lamp with retro reflecting device IA

## Material used in manufacturing :

- lampshade PMMA transparent clear
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

## sheet description

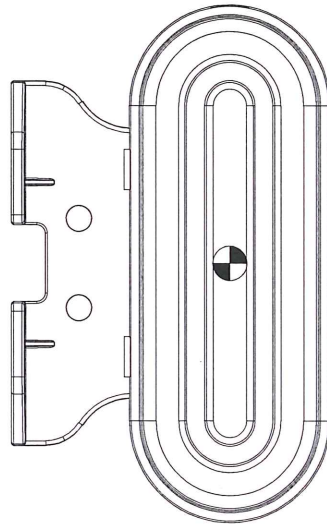
assembly on vehicle

This drawing is a part of the application for approval

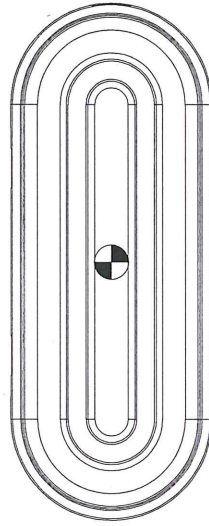
## light source

LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's white light color



front view with angled assembly bracket



front view with simple flat assembly bracket

## FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp. z o.o.  
86-014 SICIENKO, ul. Przemysłowa 5

tel. 52 360 90 50

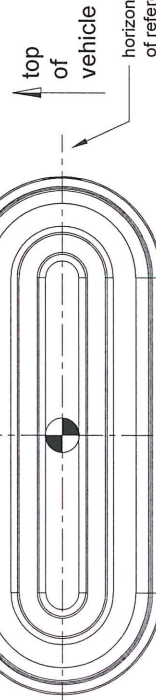
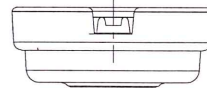
[www.fristom.com.pl](http://www.fristom.com.pl)

NIP 5542926937 REGON 341640907

MICHAŁ DYBICZ

forward  
driving  
direction

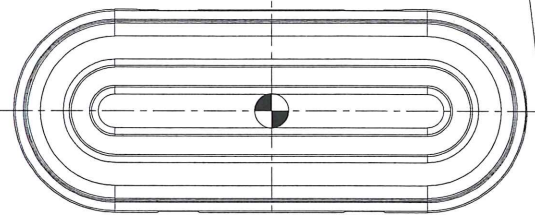
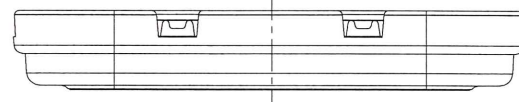
horizontal assembly on vehicle



vertical axis  
of reference

forward  
driving  
direction

vertical assembly on vehicle



horizontal axis  
of reference

## Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.  
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**Drawn by:** Michał Dybicz

**Date:** 15-04-2020

**sheet Nr.**

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## Type

**FT-072 B LED** - front LED position lamp with retro reflecting device IA

## Material used in

### manufacturing :

- lampshade PMMA transparent clear
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

## light source

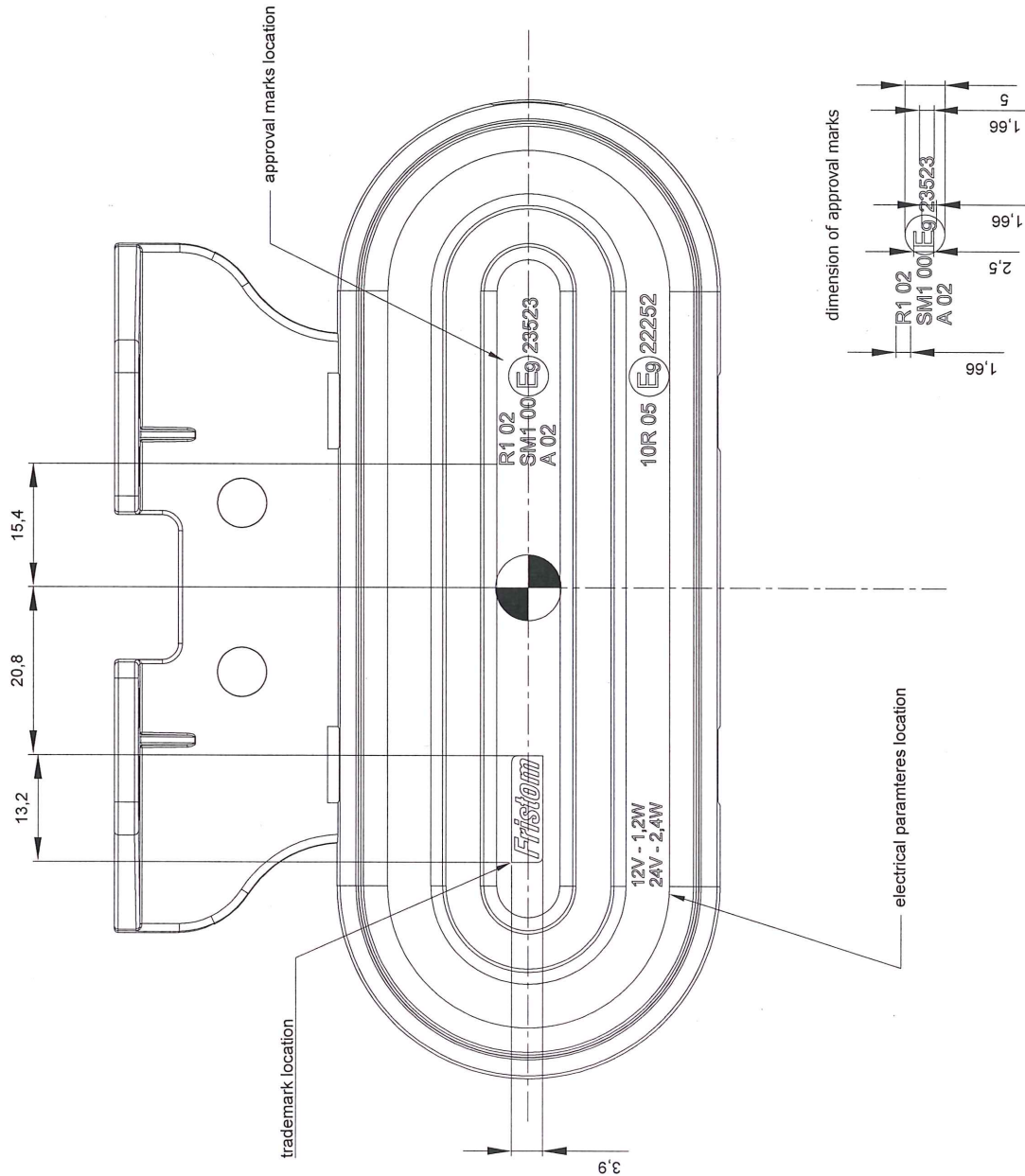
LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's white light color

## sheet description

approval markings and electrical parameters

This drawing is a part of the application for approval



Function A - front position light

12 V - 1,2 W

24 V - 2,4 W

18 LED's white light color

3 LED's serial connected in 6 parallel sections

**FRISTOM**  
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Manufacturer

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Drawn by:

Date:

15-04-2020

sheet Nr.

4/5

Type

FT-072 B LED - front LED position lamp with retro reflecting device IA

light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's white light color

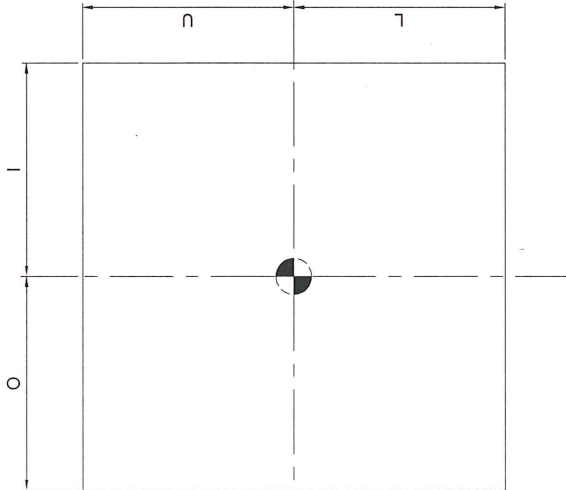
sheet description

lighting surface

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PMMA transparent clear
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



| lighting surface |                         |                         |                              |                              |
|------------------|-------------------------|-------------------------|------------------------------|------------------------------|
| function         | U <sub>upper</sub> (mm) | L <sub>lower</sub> (mm) | O <sub>outer ring</sub> (mm) | I <sub>inner ring</sub> (mm) |
| A front position | 11                      | 11                      | 45                           | 45                           |

Determining the lower , upper and lateral limits of the illumination surface of the lamp device.

According to European Directive 91/663/EEC , Annex I "Installation of lighting and light-signalling devices" clause 1.9.2.

According to ECE regulation 48/06 "Installation of light and light-signalling devices" clause 2.10.3.2.

FRISTOM

Spółka z ograniczoną odpowiedzialnością Sp.k  
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Drawn by:

Michał Dybicz

Date:

15-04-2020

sheet Nr.

5/5

Type

FT-072 B LED - front LED position lamp with retro reflecting device IA

light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's white light color

sheet description

variant tradenames and descriptions

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PMMA transparent clear
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

| item                   | description                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------|
| FT-072 B LED           | FT-072 B LED Clearance Lamp LED 12-36V, white with reflector and a loom 0,5m.                              |
| FT-072 B LED Mxx       | FT-072 B LED Clearance Lamp LED 12-36V, white with reflector and a loom xxm.                               |
| FT-072 B LED QS075     | FT-072 B LED QS075 Clearance Lamp LED 12-36V, white with reflector a loom lenght 0,5m and connector QS075. |
| FT-072 B LED QS075 Mxx | FT-072 B LED QS075 Clearance Lamp LED 12-36V, white with reflector a loom lenght xxm and connector QS075.  |
| FT-072 B LED QS150     | FT-072 B LED QS150 Clearance Lamp LED 12-36V, white with reflector a loom lenght 0,5m and connector QS150. |
| FT-072 B LED QS150 Mxx | FT-072 B LED QS150 Clearance Lamp LED 12-36V, white with reflector a loom lenght xxm and connector QS150.  |
|                        | where x is number from 0 till 9                                                                            |

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MICHAŁ DYBICZ

## Manufacturer

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**Drawn by:** Michał Dybicz

**Date:** 15-04-2020

**sheet Nr.**

1/5

## Type

**FT-072 C LED** - rear LED position lamp with retro reflecting device IA

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's red light color

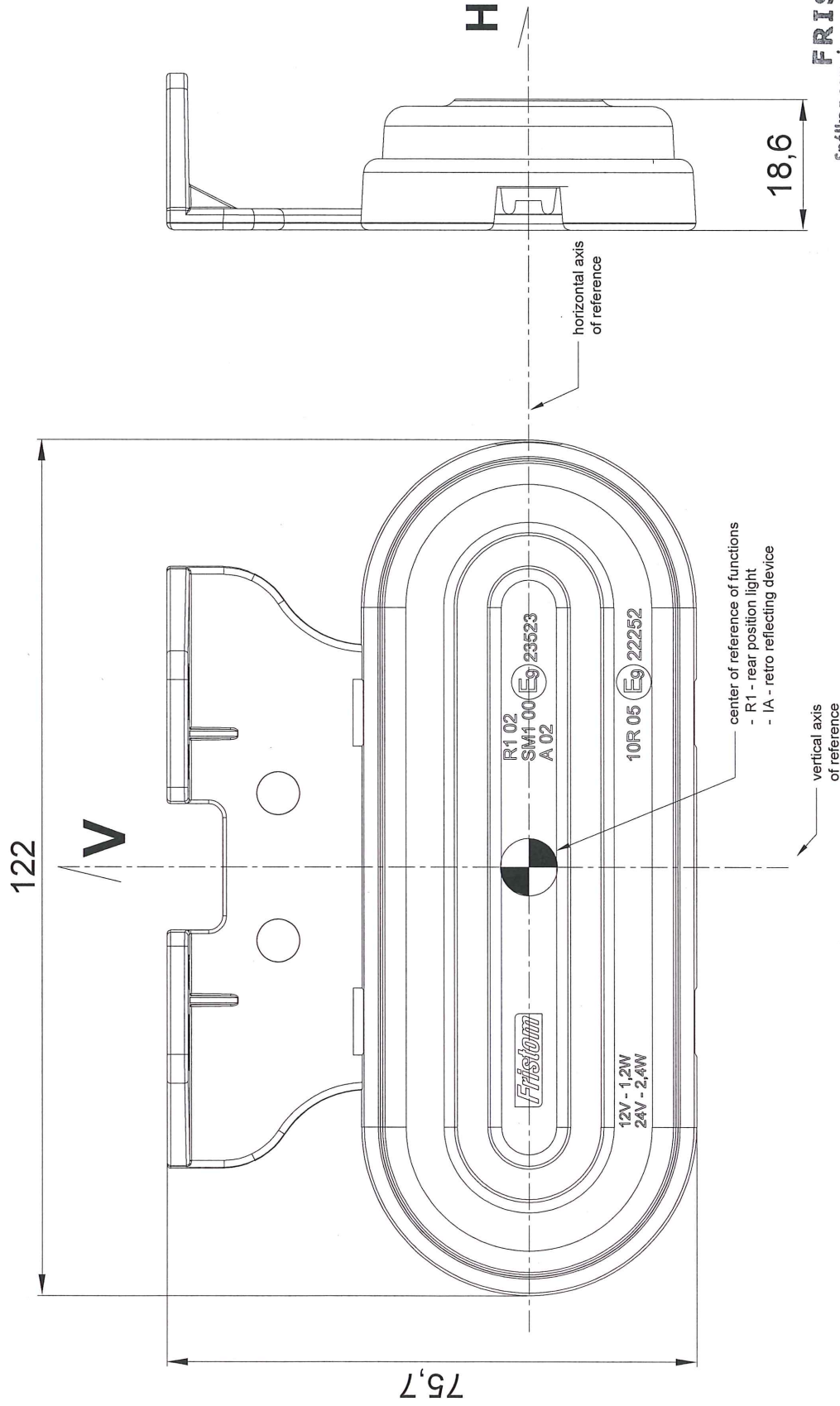
## sheet description

general drawing / lamp functions

This drawing is a part of the application for approval

## Material used in manufacturing :

- lampshade PMMA transparent red
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



**FRISTOM**  
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NIP 5542926937 REGON 341640907

**IDIADA** front view with angled assembly bracket  
PC20020202

MICHAŁ DYBICZ

## Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.K.  
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**Drawn by:** Michał Dybicz

**Date:** 15-04-2020

**sheet Nr.**

2/5

## Type

**FT-072 C LED** - rear LED position lamp with retro reflecting device IA

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's red light color

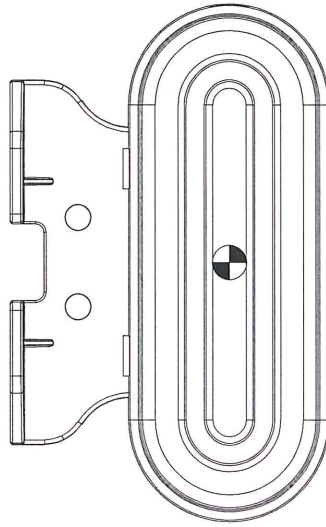
## sheet description

assembly on vehicle

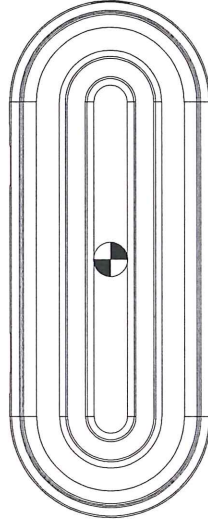
This drawing is a part of the application for approval

## Material used in manufacturing :

- lampshade PMMA transparent red
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



front view with angled assembly bracket



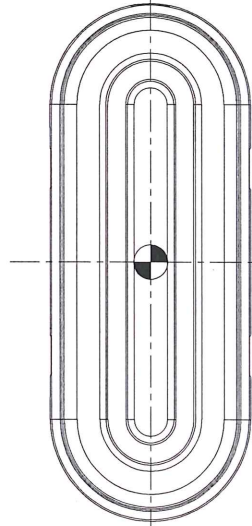
front view with simple flat assembly bracket

**FRISTOM**  
Spółka z ograniczoną odpowiedzialnością Sp.k.  
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tel. 52 360 90 50  
[www.fristom.com.pl](http://www.fristom.com.pl)  
NIP 5542926937 REGON 341640907  
MICHAŁ DYBICZ

forward  
driving  
direction



horizontal assembly on vehicle

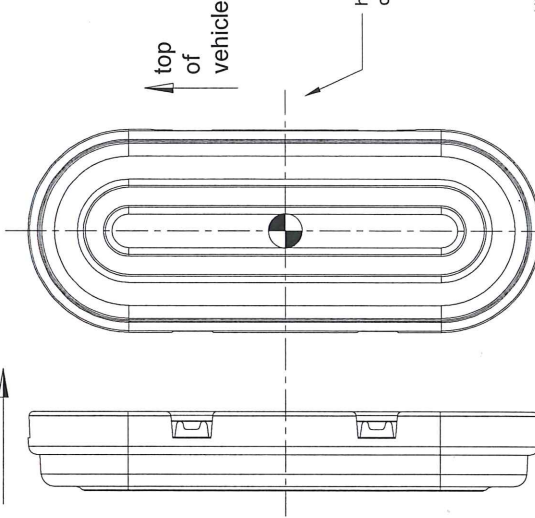


vertical axis  
of reference

forward  
driving  
direction



vertical assembly on vehicle



vertical axis  
of reference

## Manufacturer

FRISTOM Spółka z ograniczoną odpowiedzialnością Sp. z o.o.  
86-014 Sicienko / Polska  
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Drawn by: Michał Dybicz

Date: 15-04-2020

sheet Nr. 3/5

## Type

FT-072 C LED - rear LED position lamp with retro reflecting device IA

## Material used in manufacturing :

- lamshade PMMA transparent red
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

## light source

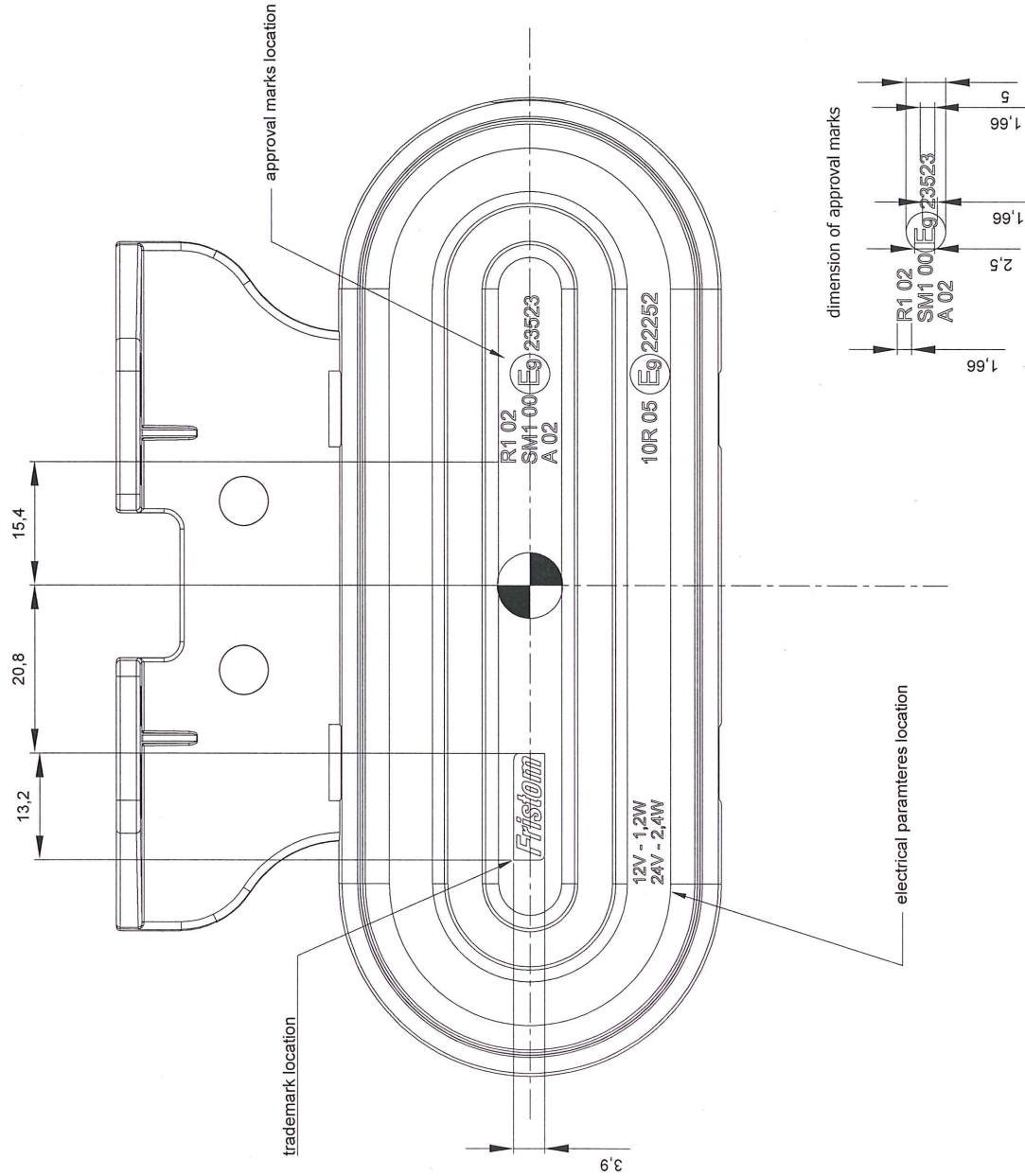
LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's red light color

## sheet description

approval markings and electrical parameters

This drawing is a part of the application for approval



Function R1 - rear position light

12 V - 1,2 W  
24 V - 2,4 W

18 LED's red light color

3 LED's serial connected in 6 parallel sections

**FRISTOM**

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**Manufacturer**  
FRISTOM Spółka z ograniczoną odpowiedzialnością Sp.k.  
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**Drawn by:** Michał Dybicz  
**Date:** 15-04-2020  
**sheet Nr.:** 4/5

**Type**

**FT-072 C LED** - rear LED position lamp with retro reflecting device IA

**light source**

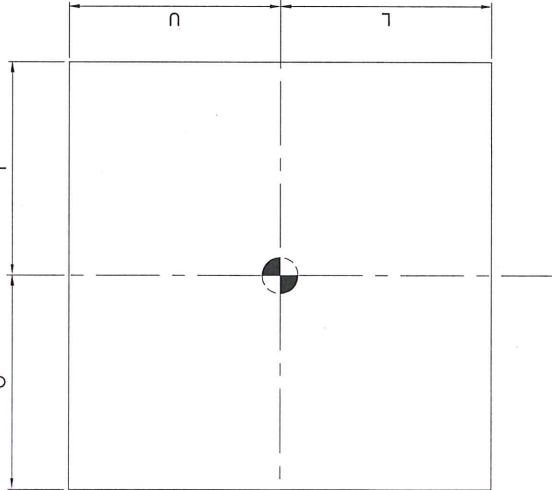
LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's red light color

**sheet description**

lighting surface  
This drawing is a part of the application for approval

**Material used in manufacturing :**

- lampshade PMMA transparent red
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



| lighting surface       |                         |                         |                         |                         |
|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| function               | U <sub>upper</sub> (mm) | L <sub>lower</sub> (mm) | O <sub>outer</sub> (mm) | I <sub>inner</sub> (mm) |
| R1 rear position light | 11                      | 11                      | 45                      | 45                      |

Determining the lower , upper and lateral limits of the illumination surface of the lamp device.

According to European Directive 91/663/EEC , Annex I "Installation of lighting and light-signalling devices" clause 1.9.2.

According to ECE regulation 48/06 "Installation of light and light-signalling devices" clause 2.10.3.2.

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Drawn by: Michał Dybicz  
Date: 15-04-2020  
sheet Nr. 5/5

Type

FT-072 C LED - rear LED position lamp with retro reflecting device IA

Material used in manufacturing :

- lampshade PMMA transparent red
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's red light color

sheet description

variant tradenames and descriptions

This drawing is a part of the application for approval

| item                   | description                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------|
| FT-072 C LED           | FT-072 C LED Clearance Lamp LED 12-36V, RED with reflector and a loom 0,5m.                              |
| FT-072 C LED Mxx       | FT-072 C LED Clearance Lamp LED 12-36V, RED with reflector and a loom xmm.                               |
| FT-072 C LED QS075     | FT-072 C LED QS075 Clearance Lamp LED 12-36V, RED with reflector a loom lenght 0,5m and connector QS075. |
| FT-072 C LED QS075 Mxx | FT-072 C LED QS075 Clearance Lamp LED 12-36V, RED with reflector a loom lenght xmm and connector QS075.  |
| FT-072 C LED QS150     | FT-072 C LED QS150 Clearance Lamp LED 12-36V, RED with reflector a loom lenght 0,5m and connector QS150. |
| FT-072 C LED QS150 Mxx | FT-072 C LED QS150 Clearance Lamp LED 12-36V, RED with reflector a loom lenght xmm and connector QS150.  |
|                        | where x is number from 0 till 9                                                                          |

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Drawn by: Michał Dybicz

Date: 15-04-2020

sheet Nr.

1/5

## Type

FT-072 Z LED - LED side marking lamp with retro reflecting device IA

## Material used in

### manufacturing :

- lampshade PMMA transparent amber
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

## sheet description

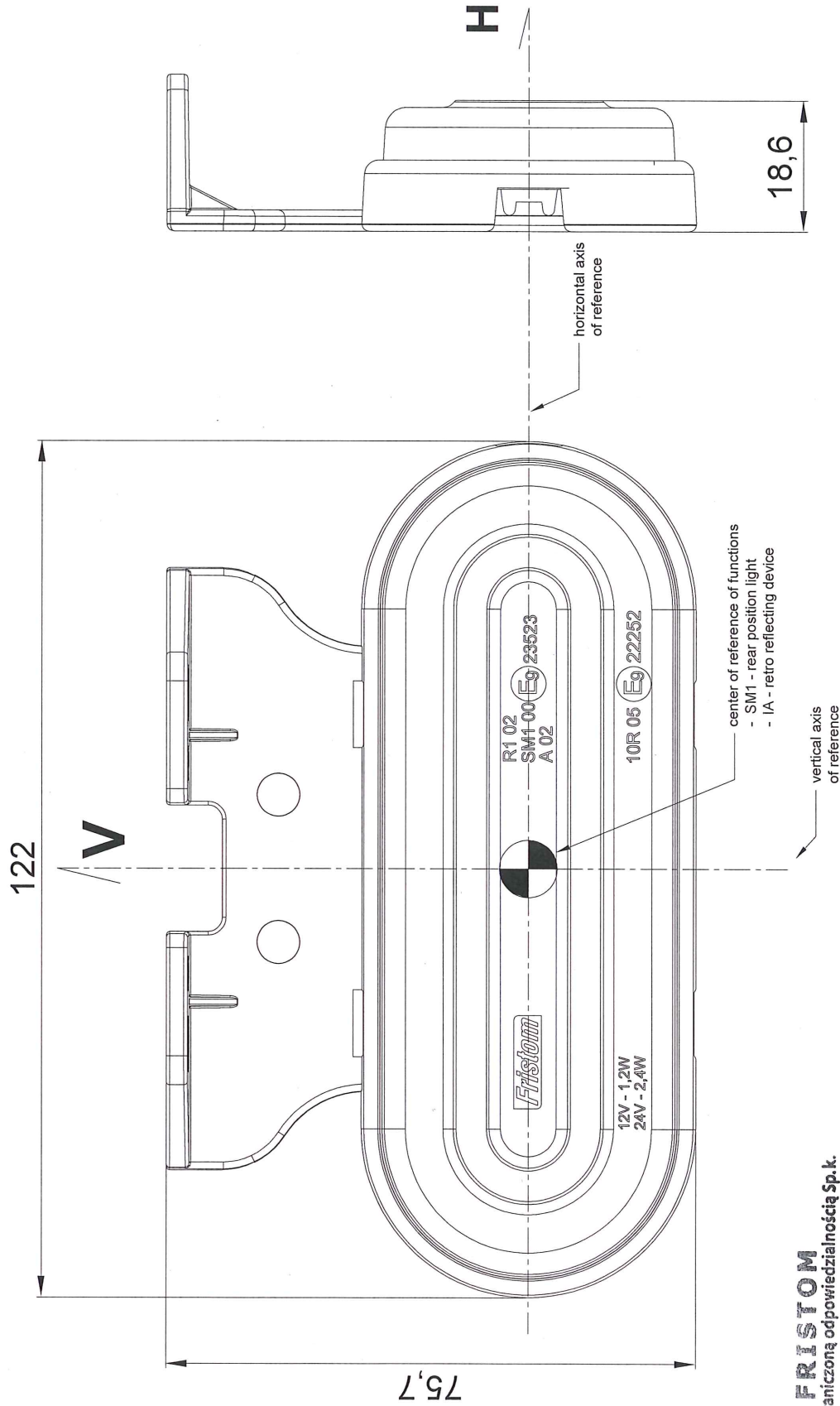
general drawing / lamp functions

This drawing is a part of the application for approval

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's white light color



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DIADA

MICHAŁ DYBICZ

front view with angled assembly bracket

PC20020202

## Manufacturer

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Drawn by: **Date:**

Michał Dybicz 15-04-2020

sheet Nr.

2/5

## Type

FT-072 Z LED - LED side marking lamp with retro reflecting device IA

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's white light color

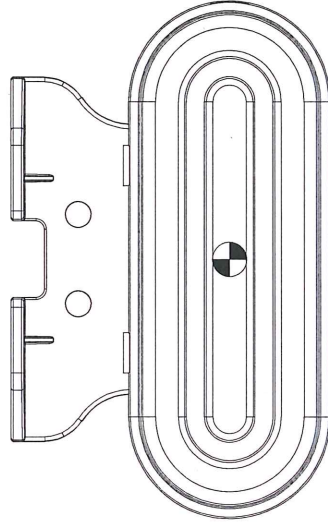
## sheet description

assembly on vehicle

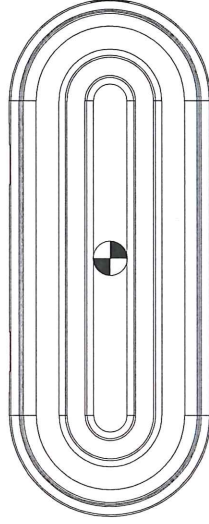
This drawing is a part of the application for approval

## Material used in manufacturing :

- lampshade PMMA transparent amber
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



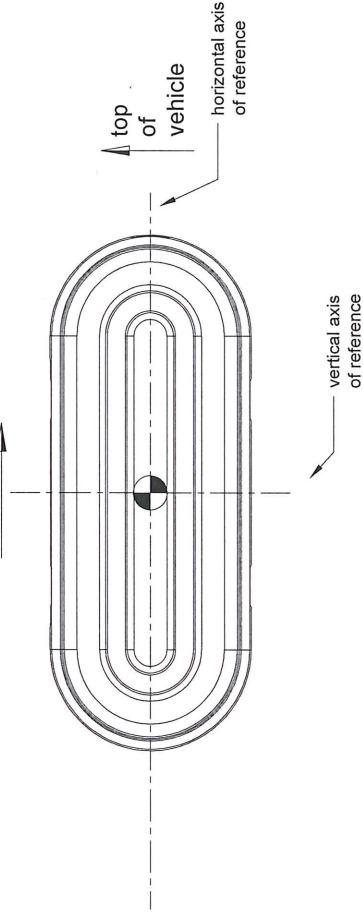
front view with angled assembly bracket



front view with simple flat assembly bracket

only horizontal assembly on vehicle

forward driving direction if  
assembled right



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## Type

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|                                   |                            |                         |
|-----------------------------------|----------------------------|-------------------------|
| <b>Drawn by:</b><br>Michał Dybicz | <b>Date:</b><br>15-04-2020 | <b>sheet Nr.</b><br>3/5 |
|-----------------------------------|----------------------------|-------------------------|

## light source

LIGHT SOURCE : LED CHIP SMD chip mounted

18 LED's white light color

## sheet description

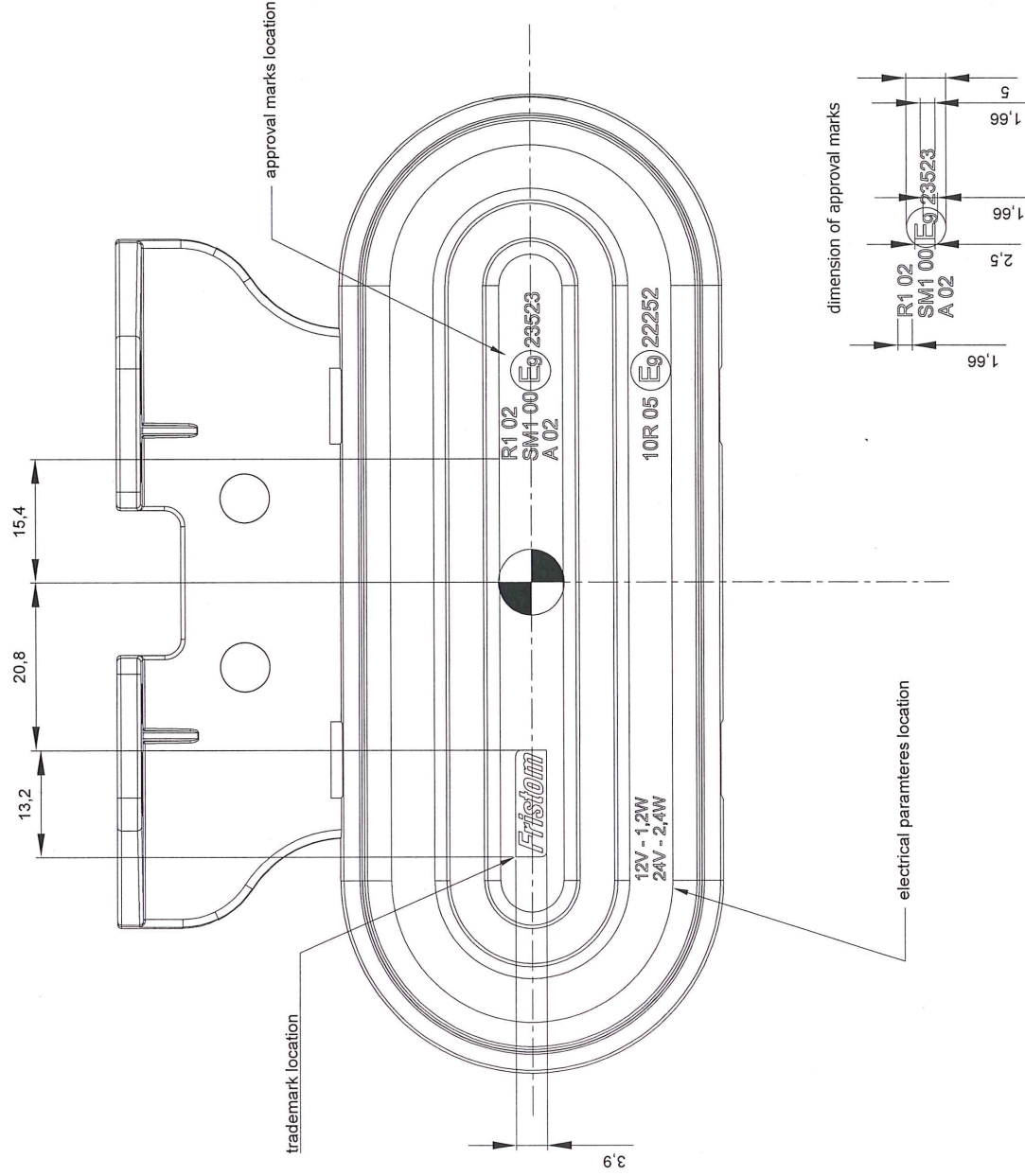
approval markings and electrical parameters

This drawing is a part of the application for approval

**Material used in**  
**manufacturing :**

- lampshade PMMA transparent amber
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

FT-072 Z LED - LED side marking lamp with retro reflecting device IA



Function SM1 - side marking light

12 V - 1,2 W

24 V - 2,4 W

18 LED's white light color

3 LED's serial connected in 6 parallel sections

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PC20020202

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Drawn by: Michał Dybicz Date: 15-04-2020 sheet Nr. 4/5

Type

FT-072 Z LED - LED side marking lamp with retro reflecting device IA

light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED's white light color

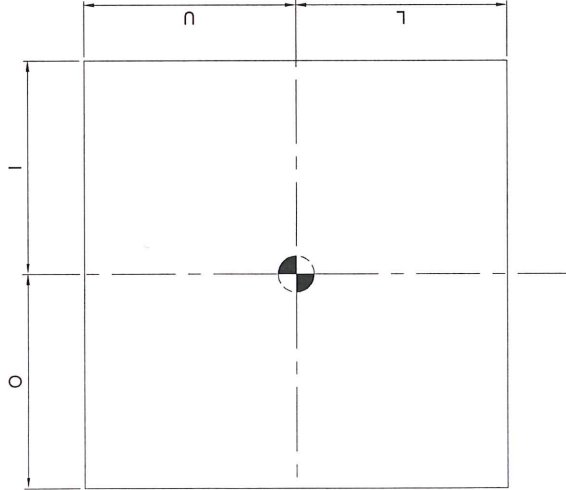
sheet description

lighting surface

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PMMA transparent amber
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin



| lighting surface       |                         |                         |                         |                         |
|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| function               | U <sub>upper</sub> (mm) | L <sub>lower</sub> (mm) | O <sub>outer</sub> (mm) | I <sub>inner</sub> (mm) |
| SM1 side marking light | 11                      | 11                      | 45                      | 45                      |

Determining the lower , upper and lateral limits of the illumination surface of the lamp device.  
According to European Directive 91/663/EEC , Annex I "Installation of lighting and light-signalling devices" clause 1.9.2.  
According to ECE regulation 48/06 "Installation of light and light-signalling devices" clause 2.10.3.2.

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Drawn by:

Michał Dybicz

Date:

15-04-2020

sheet Nr.

5/5

Type

FT-072 Z LED - LED side marking lamp with retro reflecting device IA

light source

LIGHT SOURCE : LED CHIP SMD chip mounted  
18 LED 's white light color

sheet description

variant tradenames and descriptions

This drawing is a part of the application for approval

Material used in manufacturing :

- lampshade PMMA transparent amber
- housing PC translucent diffusive
- frame - mounting bracket - PBT black
- PCB FR4
- potting compound epoxy resin

| item                            | description                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------------------|
| FT-072 Z LED                    | FT-072 Z LED Clearance Lamp LED 12-36V, YELLOW with reflector and a loom 0,5m.                              |
| FT-072 Z LED Mxx                | FT-072 Z LED Clearance Lamp LED 12-36V, YELLOW with reflector and a loom xxm.                               |
| FT-072 Z LED QS075              | FT-072 Z LED QS075 Clearance Lamp LED 12-36V, YELLOW with reflector a loom lenght 0,5m and connector QS075. |
| FT-072 Z LED QS075 Mxx          | FT-072 Z LED QS075 Clearance Lamp LED 12-36V, YELLOW with reflector a loom lenght xxm and connector QS075.  |
| FT-072 Z LED QS150              | FT-072 Z LED QS150 Clearance Lamp LED 12-36V, YELLOW with reflector a loom lenght 0,5m and connector QS150. |
| FT-072 Z LED QS150 Mxx          | FT-072 Z LED QS150 Clearance Lamp LED 12-36V, YELLOW with reflector a loom lenght xxm and connector QS150.  |
| where x is number from 0 till 9 |                                                                                                             |

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